

2 U.S. ✓ UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration
5a (Washington 25, D. C.) //

May 2, 1950

3 ✓ TELEPHONE ENGINEERING MEMORANDUM, A

(For Internal Use Only)

SUBJECT: Preloan Activities of the Engineering Division in Connection with Telephone Loans

The following procedure is based on the "Loan Procedure for Telephone Loan Applications from Existing Companies" issued April 13, 1950.

The responsibilities of the Engineering Division in connection with an application for a telephone loan commence with the receipt of a notification from the Applications and Loans Division that a determination has been made that the application is in order and that a detailed study of the existing and proposed physical plant by an REA engineer is justified and necessary.

With the above notification the Engineering Division should receive from the Applications and Loans Division a copy of REA Form AL-T-1 and all maps and other data submitted with the application. Where changes have been made in the original application at the suggestion of the Applications and Loans Division, in order to meet the requirements for area coverage or for any other reason, such changes should be shown on the maps and in the other data submitted to the Engineering Division.

The Chief of the Engineering Division shall be responsible for furnishing such information regarding design, costs, and valuation of physical plant as may be requested by the Applications and Loans Division. In the discharge of such responsibilities he shall use the services of the telephone specialists assigned to the Office of the Chief and such field engineers as may be required.

Initial Request from the Applications and Loans Division.

The usual initial request from the Applications and Loans Division will be for:

1. A valuation of that part of the existing physical plant which will be used in place as a part of the proposed new plant.
2. A salvage value of the items in the existing physical plant which will be displaced because of location, inadequacy, obsolescence or physical depreciation.

3. The appraisal of the adequacy of the design of the proposed new physical plant and an estimate of the amount of construction funds required to complete it.
4. In the case of a new cooperative application in which no existing property is involved, the amount of construction funds required to construct a system of adequate capacity for area coverage.
5. Estimate of engineering costs.

Determination of "Present Value" of Physical Plant.

Two methods of appraising shall be used in determining the "present value" of the existing telephone properties.

1. Original Cost and Original Cost Depreciated. When company records do not reflect original cost information then an "estimated original cost" appraisal shall be made.
2. Reproduction Cost New and Reproduction Cost New Depreciated.

Satisfactory results can be obtained in the minimum of time for both methods of appraising by establishing an average "condition percentage" for each item of plant and directly applying such "condition percentage" to the most accurate obtainable value of the item of plant. The value to be used for the "original cost basis" will be either accurate cost data available from the borrower's records or an estimate of costs based on information available as to the time of installation. The value to be used for the "reproduction costs basis" will be present day material costs and average labor and other costs for the particular area involved.

Salvage value of displaced material to be re-used in the new plant will be the "condition percentage" of the present day cost of such material. Salvage value of displaced material not to be re-used will be the value for which it can be sold, less cost of removal.

Procedure of the Engineering Division.

Upon notification from the Applications and Loans Division that a study of the physical plant of an applicant for a telephone loan is justified and necessary, the Chief of the Engineering Division shall designate a telephone engineer to assume full charge of the study to be made.

The telephone engineer shall immediately review the maps and other data submitted for sufficiency and clear all questionable details, if any, with the Applications and Loans Division.

He shall then proceed to analyze the project to determine the necessity for and adequacy of the proposed improvement, expansion, and construction of telephone lines and facilities to furnish service to the subscribers designated. Any major changes that he feels are necessary or desirable should be discussed and concurred in by the Applications and Loans Division before being made.

Having determined the above, the telephone engineer should next determine from the maps and other data which part or parts of the existing system will be displaced because of inadequacy. The plant to be displaced should be appropriately marked on the maps as it will be allowed only a salvage value in the valuation study.

The next step should be a field appraisal of the application and of the existing properties. This should be made by the telephone engineer with the assistance of a field engineer whose services should be obtained through the regional engineer.

The telephone engineer shall first review with the borrower the lay-out of the proposed new system including any changes resulting from his preliminary review of the application referred to above. After having reached an agreement with the borrower on a design of the new system, the field appraisal of the existing properties should be made.

The telephone engineer shall be directly responsible for the appraisal of the following facilities: land, buildings, central office equipment, booths and special fittings, PBX equipment, office furniture and fixtures, vehicles and work equipment, and materials and supplies, and shall direct the activities of the field engineer in the appraisal of station equipment, station wiring, poles, conduit, cable and wire. The appropriate standard forms for work sheets and reports are included in "procedure for field appraisal of application by engineer."

Upon completion of the appraisal of the existing plant, the telephone engineer shall estimate the quantities and costs of the new items of plant necessary to provide the service described in the loan application and submit the following, with all work sheets, to the Chief, Engineering Division, who, in turn, will submit the summaries to the Chief, Applications and Loans Division:

1. Valuation of reusable plant in place on the basis of original cost, original cost depreciation, reproduction cost new, reproduction cost new depreciated.
2. Salvage value of displaced plant reusable.
3. Removal cost of reusable salvage materials.
4. Net salvage value of displaced plant not reusable.
5. Rehabilitation costs of existing property remaining in plant.
6. Total additional funds necessary to complete proposed system.

7. In the case of a new cooperative application in which no existing property is involved, the amount of construction funds required to construct a system of adequate capacity for area coverage.
8. Estimate of engineering cost.

(Appropriate standard forms for work sheets and reports are included in "procedure for review of field engineer's report by Engineering Division and submission of report to A & L.")

This completes the work of the Engineering Division up to the time of the allocation.

Review of System Design and Cost Data.

The borrower has several obligations to fulfill before the actual loan is made. One obligation is an actual survey of the area and sign-up of prospective subscribers. Should this sign-up reveal an appreciable change in the number of subscribers, classification of subscribers or any other change that would affect the system design, then the Applications and Loans Division should request the Engineering Division to review the system design and cost estimates. When such a review reveals a change in the amount of funds needed revised summaries as outlined above will be furnished to the Applications and Loans Division for establishing the amount of the loan.

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